University of Gdańsk

Subject card

Subject name and code	Profitability Assessment of Logistics Investments, PG_00199365		
Field of study	Economics		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2027/2028
Education level	Master's studies	Subject group	Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	5.0
Learning profile	academic	Assessment form	exam
Conducting unit	Department of Transport Economics -> Faculty of Economics -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Przemysław Borkowski, prof. UG	
	Teachers		

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	30.0	0.0	30.0	0.0	60
	E-learning hours included: 0.0						

Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
	Number of study hours	60	0.0	65.0	125

Subject objectives	1. Understanding the principles of assessing the financial efficiency of logistics infrastructure projects and investments in logistics enterprises. 2. Understanding the principles of conducting risk assessment for investment projects in logistics. 3. Acquiring skills to independently conduct comparative evaluations and optimize investment decisions in logistics. 4. Acquiring skills to determine the costs and benefits of logistics projects.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[EKONMU2_W03] has a knowledge of relations between economic phenomena, entities and organisations as well as public institutions functioning in the national, international and intercultural spheres	He/she has knowledge of applied methods for evaluating logistics projects. He/she also possesses knowledge of mechanisms for diversifying investment risk.	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report
	[EKONMU2_W08] has an in-depth knowledge of processes occurring in enterprises and economic organisations and with related areas, as well as of processes of change in public institutions; knows methods of research on the regularities governing these changes, taking into account the influence of external stakeholders on them	The participant in the classes acquires knowledge about standards for evaluating investment projects in the logistics sector, enabling comparisons from the perspectives of both entrepreneurs and investors. They understand the interdependencies among participants in the logistics investment market.	[SW2] presentation/project/paper/ report
	[EKONMU2_U04] can forecast and model complex economic and social processes using quantitative and qualitative methods and tools developed by economic sciences (including statistics and econometrics)	He/she can assess investment efficiency using the Cost-Benefit Analysis (CBA) method, knows formulas for modeling Expected Net Present Value (ENPV), can evaluate tangible and intangible components of investments, and can perform an analysis of the environmental impact of investments. In terms of risk assessment, he/she can identify sources of risk, prepare a risk list and map, assess investment risk using selected quantitative and qualitative methods, and propose risk reduction instruments tailored to the problem.	[SU2] presentation/project/paper/ report [SU5] implementation of a problem task
	[EKONMU2_K04] is ready to think and act in an entrepreneurial manner; adapts to new situations and conditions; undertakes challenges of creative thinking; acquires resilience to failures; can assess risks and threats and find ways of counteracting their effects	He/she is acquiring skills in analytically approaching complex problems where the final outcome is influenced by multiple variables. He/she can adjust project implementation conditions and react by selecting analytical tools based on changes in the socio-economic environment.	[SK6] demonstration of practical skills
	[EKONMU2_U07] can independently propose solutions to complex economic or social problems, select methods of analysis and conduct conclusive procedures in this respect	He/she can make a selection of the optimal logistics investment based on criteria commonly used in economic practice.	[SU5] implementation of a problem task
	[EKONMU2_U02] can use acquired knowledge to describe and analyse the causes and course of economic and social processes and phenomena, and can formulate his/her own opinions and critically select data and analysis methods based on the achievements of economic and social sciences	He/she can formulate decision criteria regarding the acceptance or rejection of an investment project in logistics for enterprises and infrastructure logistics.	[SU2] presentation/project/paper/ report [SU6] demonstration of practical skills
	[EKONMU2_K01] recognises the importance of knowledge in the field of economics in the process of identifying and solving economic problems and of consulting experts when having difficulties in solving them independently	The student is developing the ability to select key elements in multi-criteria analysis of risks, understands the limitations of the methods used, and can find appropriate investment evaluation procedures in literature.	[SK2] presentation/project/paper/ report [SK5] implementation of a problem task
	[EKONMU2_U06] can practically apply various forms and range of acquired knowledge in economics, finance and management, supplementing it with an independent critical analysis of its efficiency and usefulness	He/she can choose quantitative and qualitative tools and indicators depending on the nature of the evaluated logistics investment.	[SU5] implementation of a problem task

Course outcome	Subject outcome	Method of verification
[EKONMU2_W07] has an in-depth knowledge of economic and financial principles governing the functioning and management of economic entities and organisations, as well as of systems of legal, organisational, professional, moral and ethical norms and rules organising public structures and institutions, both in the national and international spheres	He/she applies procedures for evaluating logistics projects, can estimate profitability and risk indicators of investments.	[SW2] presentation/project/paper/ report [SW5] implementation of a problem task
[EKONMU2_K03] inspires and organises preparation of economic and social projects, following the idea of sustainable development, reconciling legal, economic, ecological, political and social requirements	He/she acquires the skill of balancing competitive requirements such as economic efficiency, environmental protection, and social consequences in the implementation of investment projects.	[SK1] oral statement/conversation/ discussion [SK2] presentation/project/paper/ report
[EKONMU2_W04] has an in-depth knowledge of different types of economic and social ties and regularities governing them; has an in-depth knowledge of economic and financial ties between enterprises	He/she is familiar with contemporary methodologies for analyzing investment efficiency. He/she knows methods for risk identification, both qualitative and quantitative methods for risk assessment.	[SW1] oral statement/ conversation/discussion

Subject contents

1. Specifics of investments in enterprise logistics and infrastructure logistics.

2. Financing logistics projects: internal and external sources, cost of capital.

3. Static methods for evaluating logistics projects.

4. Dynamic methods for evaluating investments in logistics.

5. Methodology for evaluating logistics projects.

6. Criteria and principles for assessing the impact of logistics investments on the environment.

7. Cost-Benefit Analysis (CBA) and calculating Expected Net Present Value (ENPV).

8. Risk identification in logistics investments.

9. Assessment of the riskiness of logistics investments.

10. Risk reduction in investment projects in logistics.

Any doubts regarding the issues discussed during classes can be discussed during consultations.

Prerequisites and co-requisites

He/she has the ability to use spreadsheet software and knowledge of basic logistics and economic terminology.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project	51.0%	80.0%
Exercises	51.0%	20.0%

Recommended reading	Basic literature	1. P. Borkowski, (2013), Metody obiektywizacji oceny ryzyka w inwestycjach infrastrukturalnych w transporcie, WUG. 2. P. Borkowski, (2010), Zagrożenia i ryzyko związane z realizacją projektów inwestycyjnych, w: Podręcznik zarządzania projektem infrastrukturalnym w ramach Programu Operacyjnego Infrastruktura i Środowisko, Ministerstwo Środowiska, Warszawa. 3. Solonina, Nataliya & Alekseeva, Larisa & Barykin, Sergey, (2019), Logistics investment model of project evaluation. MATEC Web of Conferences. 265. 07021. 10.1051/matecconf/201926507021
	Supplementary literature	1. Manuj, I. and J.T. Mentzer, (2008), Global Supply Chain Risk Management Strategies, International Journal of Physical Distribution & Logistics Management 38 (3): 192 - 223. 2. Instrukcja oceny efektywności ekonomicznej przedsięwzięć drogowych i mostowych dla dróg wojewódzkich, (2008), IBDiM, Warszawa. 3. Bowersox, D.J., D.J. Closs and M. B. Cooper (2012) Supply Chain Logistics Management , 4th Edition, New York: McGraw-Hill.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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